National Coastal Data Development Center (NCDDC)

July 17, 2000

NCDDC Review

- Congressional Mandate
- Bay St. Louis Location/August Opening(?)
- Concurrent Phase 0 Implementation & Phase 1 Planning
- Initial Focus on Subset of Data and Functions
- Leverage Existing Capabilities
- Gradually Grow Until Base Funding Secured

Team Members

- **Richard Barazotto - Project Manager**

- **Mitretek Systems (Project Management Team) - Coordination, Requirements Analysis, Systems Engineering, Technical Oversight, Financial planning**
- **Analysis and Technology / NRL (Project Performance Team) - System Architecture, Software Engineering, Systems Development and Testing**
- **Project Operations Team - Operations/applications (initially contract personnel)**

NCDDC Phase 0 Goals

- **Develop FY00 - FY 2002 budgets**
- **Develop mission statement/staffing plan**
- **Initiate Phase I planning process**
- **Implement initial proof-of-concept capability**
- **Establish facility at Stennis Space Center & hold NCDDC dedication**

MISSION/FUNCTION

- Provide archive & access for the long-term coastal data record.

- Includes Data Cataloging/Data Mining, Data Access, Data QC/Integration, Archiving, and New Product Development.

STAFFING PLAN

- Limited initial federal staffing (7 FTE):
  - Director
  - 4 Liaison Officers (3 existing, 1 recruit action)
  - 2 Oceanographer/Physical Scientist (recruit actions)
- Contractor staffing
  - Systems Administrator
  - Applications Programmer & Web Developer
  - Oceanographic services
  - Administrative services

PHASE I PLANNING

- Concept of Operations (CON-OPS) by 8/00
  - Documents “nuts & bolts” of phase 0 operations
- Phase 0 to Phase I Transition Plan by 9/00
- Phase I requirements documentation by 12/00
  - Includes feed-back from phase 0 operations
  - How to validate requirements

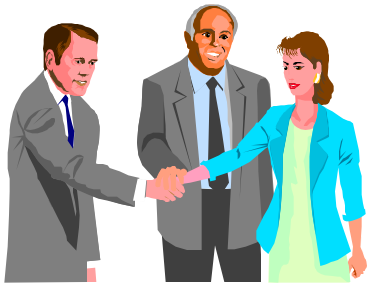
PHASE 0 FUNCTIONS

- **Data cataloging/data discovery**
  - **Electronic menu w/quality information**
  - **Proactive “data mining”**
- **Data Access**
  - **Distributed Object Technology (DOT)**
  - **Hot links to other sources**
- **Data QC/Data Fusion**
- **Data Archive**
- **New Product Development**

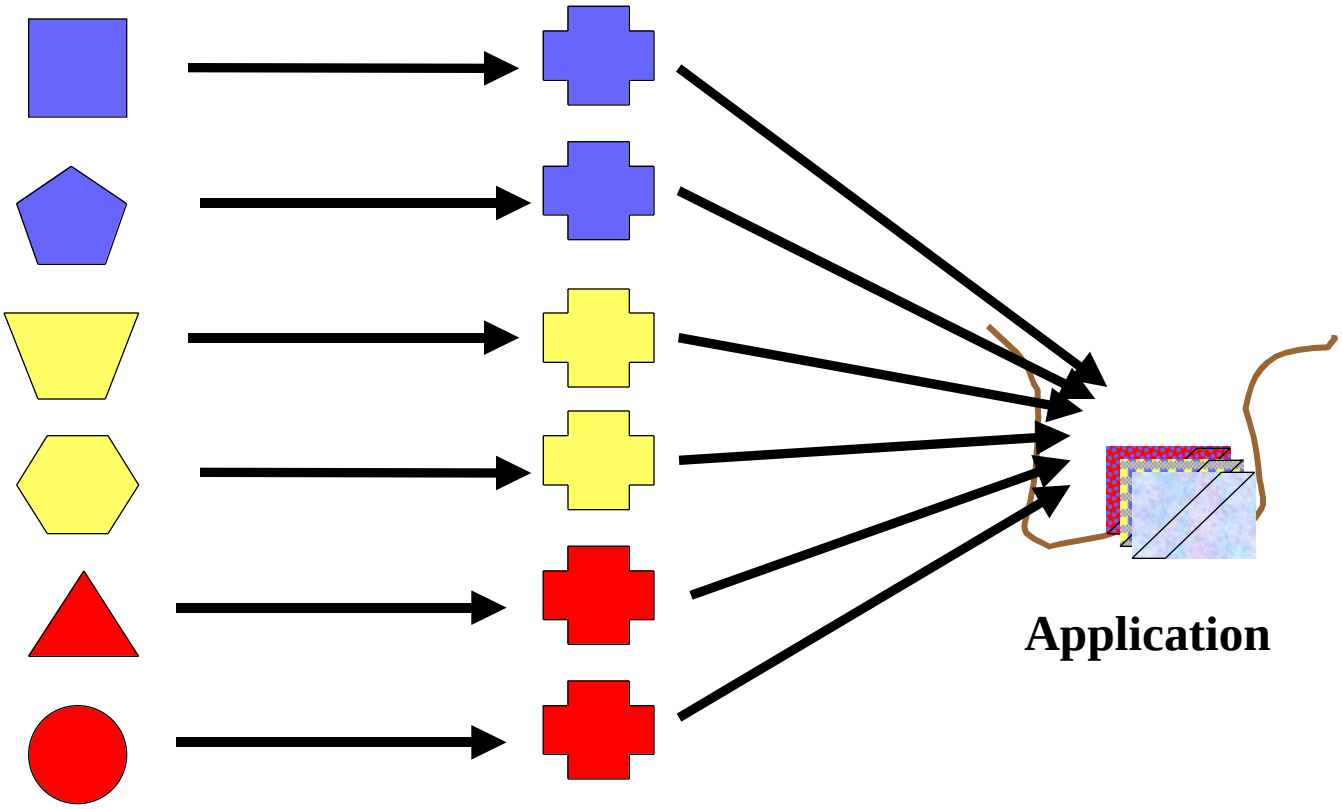
Why a Distributed Object Technology (DOT) Middleware

- **There will *not* be consensus on hardware platforms;**
- **There will *not* be consensus on operating systems;**
- **There will *not* be consensus on network protocols;**
- **There will *not* be consensus on Data formats.**

There *must* be consensus on interoperability and an infrastructure to support it.



Data Flow Before Middleware



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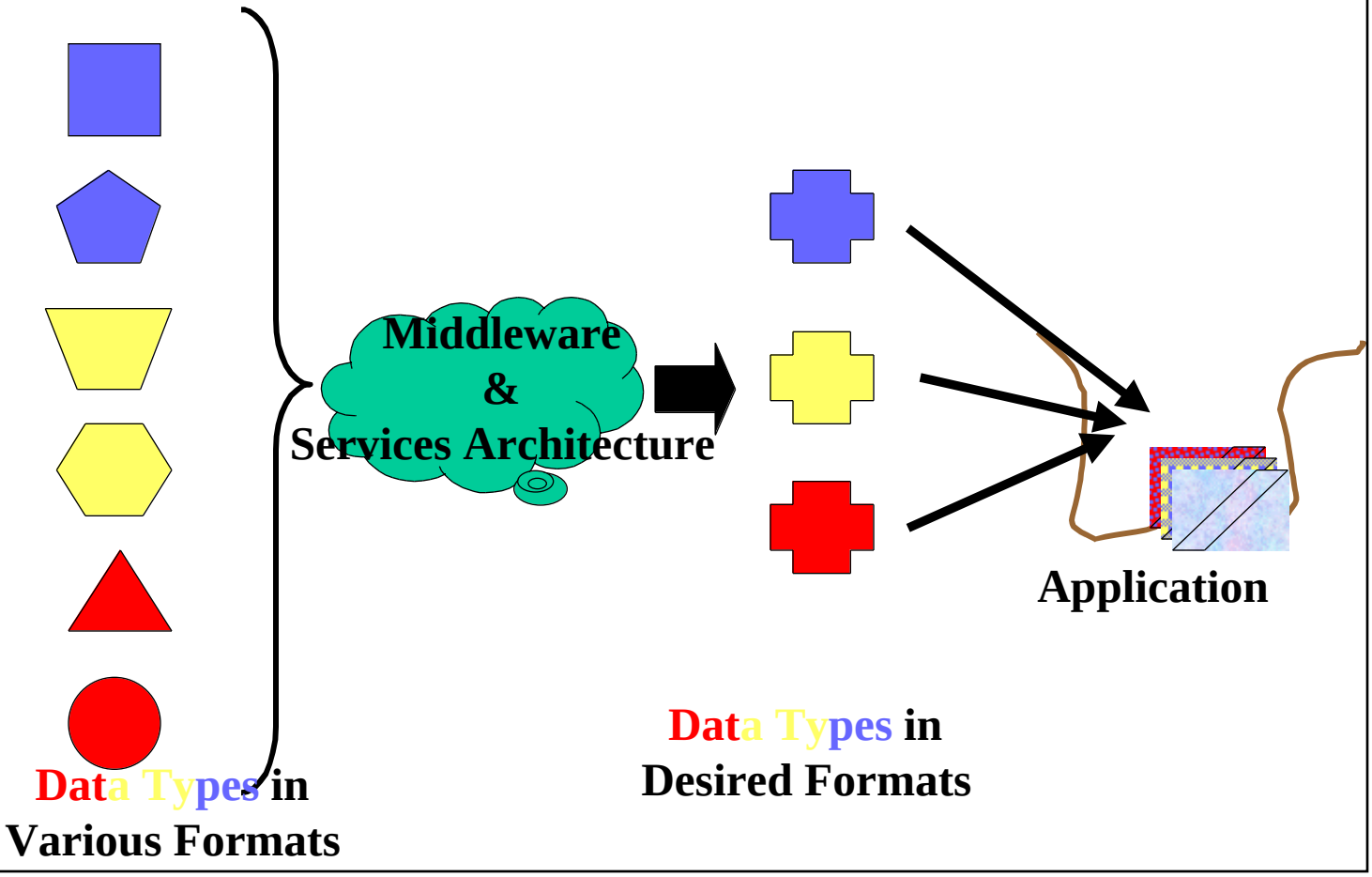

PROOFS OF CONCEPT

- Coral Reef Monitoring
  - NESDIS/NODC&NGDC, NOS/NCCOS&CSC, and TAMU
- Hurricane Floyd Impacts
  - EPA & NOS/CSC
- Harmful Algal Bloom
  - NMFS/MS, NOS/NCCOS, & NESDIS/ORA

FACILITY DEDICATION

- MOU with NASA signed June 6th -- remodeling begun June 14th. Sixty days to complete.
- Operational Demonstration Sept 2000 - Jan 2001.
- Recommend NCDDC dedication Oct 2000.